



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/477,880	01/05/2000	Donald Edgar Blahut	129250-002093/US/COA	9862
32498 7590 07/11/2011 CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC P.O. BOX 1995 VIENNA, VA 22183				
EXAMINER				
DONAGHUE, LARRY D				
ART UNIT		PAPER NUMBER		
2454				
MAIL DATE		DELIVERY MODE		
07/11/2011		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/477,880

**Applicant(s)**

BLAHUT ET AL.

**Examiner**

LARRY DONAGHUE

**Art Unit**

2454

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/24/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 7-10, 12-14, 16-18, 20, 22-25, 27, 29, 31 and 32 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☒ Claim(s) 7-10 and 22-25 is/are allowed.

- 6) ☒ Claim(s) 1, 4, 12-14, 16-18, 20, 27, 29, 31 and 32 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Correspondence's Patent Drawing Review (PTO-943)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. Claims 1-2,4-5, 7-10, 12-25 and 27-32 are presented for examination.
2. Claims 7-10 and 22-25 are allowed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,4,12,14,16-18,20 and 27, 29 -32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hrastar et al. (6,286,058) and Nordman (6,061,346) in view of Gorman et al. (6,137,793) and Maeshima et al. (6,092,113).

As to claim 1, Hrastar et al. taught the specifying routing information for an endpoint, wherein the routing information specifies primary and alternative Internet Protocol (IP) addresses (901); and communicating data to the endpoint using the specified primary IP address except during periods of service interruption in which one of the alternative IP addresses are used Col. 14, lines 11-62). Further, Hrastar et al. taught the device is a part of a cable television network ,CATV (101, 122).

3.

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ) .It would have been obvious to one of ordinary skill in the data processing art at the

time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

4.

As to claim 4, Hrastar et al. taught storing a routing table comprising a first Internet Protocol (IP) address associated with routing data to an endpoint via the primary communications channel (132) and a second IP address (901) associated with routing data to the endpoint over a secondary communications channel (131) ; and routing data to the endpoint as a function of the routing table (901) such that during periods of service interruption on the primary communications channel data is routed to the endpoint via the secondary communications channel, whereas data is routed to the endpoint via the primary communications channel otherwise (col. 14, lines 11-62).

Nordman taught establishing tunnel between, wired network and a wireless linked device (col. 8, lines 9-42).

As to claim 12, Hrastar et al. taught an apparatus comprising: a device (101) for (a) specifying routing information for an endpoint, wherein the routing information specifies primary and alternative Internet Protocol (IP) addresses (901) , and (b) communicating data to the endpoint using the specified primary IP address except during periods of service interruption in which one of the alternative IP addresses are used (col. 14, lines 11-62).

Further, Hrastar et al. taught the device is a part of a cable television network ,CATV (101, 122).

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ). It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

As to claim 14, Hrastar et al. taught an apparatus (122) for use in providing Internet service to an endpoint, the apparatus comprising: a device (101) for routing data to the endpoint as a function of a routing table (901) stored therein such that during periods of service interruption on a primary communications channel (132) associated with a primary IP address data (901) is routed to the endpoint via a secondary communications channel (131) associated with a secondary IP address (901), whereas data is routed to the endpoint via the primary communications channel otherwise (col. 14, lines 11-62).

Further, Hrastar et al. taught the device is a part of a cable television network ,CATV (101, 122).

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ). It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

As to claim 16, Hrastar et al. taught a cable head-end router (101) for providing Internet Protocol (IP) packets intended for subsequent conveyance over a primary channel (132); and a cable modem data termination system (122) responsive to the provided IP packets for routing the IP packets to an endpoint as a function of a routing table (901) stored therein such that during periods of service interruption on the primary communications channel the IP packets are routed to the endpoint via a secondary communications channel (131) associated with a secondary IP address, whereas the IP packets are routed to the endpoint via the primary communications channel associated with a primary IP address otherwise (col. 14, lines 11-62).

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ). It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

As to claim 17, Hrastar et al. taught a cable head-end router (122) for providing Internet Protocol (IP) packets that include a destination field having a value associated with a first IP address (901) ; and a cable modem data termination system (122) responsive to the provided IP packets for communicating the IP packets to the endpoint using the first IP address except during periods of service interruption in which an alternative IP address(901) is used (col. 14, lines 11-61).

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ) .It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

As to claim 18, Hrastar et al. taught specifying routing information for an endpoint, wherein the routing information specifies primary and alternative Internet Protocol (IP) addresses (901); and communicating data to the endpoint using the specified primary IP address (901) over a first cable-based communications channel (132) except during periods of service interruption (col. 14, lines 11-62) in which one of the alternative IP addresses are used for communicating over a second non-cable-based communications channel (131).

Grastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ). It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

As to claim 20, . Grastar et al. taught storing a routing table (901) comprising an first-Internet Protocol (IP) address associated with routing data to an endpoint via the primary communications channel (132) and a second IP address (901) associated with routing data to the endpoint over a secondary communications channel (131); and routing data to the endpoint as a function of the routing table such that during periods of service interruption on the primary communications channel data is routed to the endpoint via the secondary communications channel, whereas data is routed to the endpoint via the primary communications channel otherwise and wherein the primary communications channel and the secondary communications channel are supported by physically different communications mediums (col. 14, lines 11-62).

Grastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.



Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ). It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

As to claim 27, Hrastar et al. taught a device for (a) specifying routing information for an endpoint, wherein the routing information specifies primary and alternative Internet Protocol (IP) addresses (901), and (b) communicating data to the endpoint using the specified primary IP address over a first cable-based channel(132) except during periods of service interruption in which one of the alternative IP addresses are used for communicating data over a second non-cable-based communications channel (131). See Col. 14, lines 11-43 and lines 54-62.

Further, Hrastar et al. taught the device is a part of a cable television network ,CATV (101, 122).

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ). It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

As to claim 29, Hrastar et al. taught a device (101) for routing data to the endpoint as a function of a routing table (901) stored therein such that during periods of service interruption on a primary communications channel (132) associated with a primary IP address data is routed to the endpoint via a secondary communications channel (131) associated with a secondary IP address (901), whereas data is routed to the endpoint via the primary communications channel otherwise and wherein the primary communications channel is physically different from the secondary communications channel (col. 14, lines 11-61).

Further, Hrastar et al. taught the device is a part of a cable television network ,CATV (101, 122).

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ) .It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

As to claim 31, Hrastar et al. taught a cable head-end router (101) for providing Internet Protocol (IP) packets intended for subsequent conveyance over a primary

cable channel (132) ; and a cable modem data termination system (122) responsive to the provided IP packets for routing the IP packets to an endpoint as a function of a routing table (901) stored therein such that during periods of service interruption on the primary cable channel the IP packets are routed to the endpoint via a secondary non-cable communications channel (131) associated with a secondary IP address (901), whereas the IP packets are routed to the endpoint via the primary cable channel associated with a primary IP address otherwise (col. 14, lines 11-62).

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24) .It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24) .

As to claim 32, Hrastar et al. taught a cable head-end router (101) for providing Internet Protocol (IP) packets that include a destination field having a value associated with a first IP address (901) ; and a cable mode data termination system (122) responsive to the provided IP packets for communicating the IP packets to the endpoint over a cable-based communications channel (132) using the first IP address except during periods of service interruption in which an alternative IP address (901) is used for

communicating the IP packets to the endpoint over a non-cable-based communications channel (131) . See Col. 14, lines 11-43 and lines 54-62.

    Hrstar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

    Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24 ) .It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24 ).

    The combination of Hrstar et al. and Nordman are supported by the teachings of Gorman et al. and Maeshima et al.

    Gorman et al. taught cable system can be cable or wireless (col. 7, lines 28-47) and establishing a VPN (col. 11, line 64-col 12, line 41) further taught the system can work with either CATV based or wireless protocol, (col. 21, lines 22-34).

    Maeshima et al. taught using an IP tunnel to creating VPN with assured band width.

    Applicant's arguments filed 9/24/2010 have been fully considered but they are not persuasive.

    Additional teachings have been supplied supporting examiners position. (see above). Applicant is reminded that attorney arguments can not take the place of evidence.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are listed on the attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LARRY DONAGHUE whose telephone number is (571)272-3962. The examiner can normally be reached on Monday-Friday 9:00 -6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph E. Avellino can be reached on 571-272-3905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Larry Donaghue/  
Primary Examiner, Art Unit 2454

